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CLAIMS:

1. A method for downscaling digital image data, comprising the steps of:  
  
providing a sequence of image data; and  
  
sampling the image data so that, for every N pixels of said  
sequence,  $(N - M) \pm 1$  pixels of the image data are  
sampled, where M and N are integers and  $M < N$ .
2. The method of claim 1, further comprising displaying the sampled said  
image data on a display device.
3. The method of claim 2, further comprising creating a count sequence  
corresponding to said sequence of image data, determining whether an instance of said  
count sequence is less than N, and if true, selecting a corresponding instance of image  
data.
4. The method of claim 3, wherein  $N = 2^n$ , where n is a positive integer, and  
wherein said step of sampling samples  $(N - M)$  of said pixels for every N pixels of said  
sequence.
5. The method of claim 1, further comprising creating a count sequence

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corresponding to said sequence of image data determining whether an instance of said count sequence is less than  $N$ , and if true, selecting a corresponding instance of image data.

6. The method of claim 5, wherein  $N = 2^n$ , where  $n$  is a positive integer, and wherein said step of sampling samples  $(N - M)$  of said pixels for every  $N$  pixels of said sequence.

7. The method of claim 6, further comprising beginning said count sequence at an offset  $K$ .

8. The method of claim 2, wherein  $N = 2^n$ , where  $n$  is a positive integer, and wherein said step of sampling samples  $(N - M)$  of said pixels for every  $N$  pixels of said sequence.

9. The method of claim 1, wherein  $N = 2^n$ , where  $n$  is a positive integer, and wherein said step of sampling samples  $(N - M)$  of said pixels for every  $N$  pixels of said sequence.

10. The method of claim 1, further comprising transmitting the sampled said image data.

11. The method of claim 1, further comprising storing the sampled said image

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data in a memory.

12. An apparatus for downscaling digital image data, comprising a sampling circuit, for sampling a sequence of image data so that  $(N - M) \pm 1$  pixels of the image data are sampled for every  $N$  pixels of said sequence, where  $M$  and  $N$  are integers and  $M < N$ .

13. The apparatus of claim 12, further comprising a graphics display device for displaying the sampled said image data.

14. The apparatus of claim 13, further comprising an adding circuit for creating a count sequence corresponding to said sequence of image data, wherein said sampling circuit is adapted for determining whether an instance of said count sequence is less than  $N$ , and if true, selecting a corresponding instance of image data.

15. The apparatus of claim 14, wherein said adding circuit includes an  $n$ -bit adder, where  $N = 2^n$ ,  $n$  is a positive integer, and wherein said sampling circuit is adapted to sample  $(N - M)$  of said pixels for every  $N$  pixels of said sequence.

16. The apparatus of claim 15, wherein said graphics display device includes one or more LCD panels.

17. The apparatus of claim 12, further comprising an adding circuit for

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creating a count sequence corresponding to said sequence of image data, wherein said sampling circuit is adapted for determining whether an instance of said count sequence is less than  $N$ , and if true, selecting a corresponding instance of image data.

18. The apparatus of claim 17, wherein said adding circuit includes an  $n$ -bit adder, where  $N = 2^n$  and  $n$  is a positive integer, and wherein said sampling circuit is adapted to sample  $N - M$  of said pixels for every  $N$  pixels of said sequence.

19. The apparatus of claim 18, wherein said adding circuit is further adapted to begin said count sequence at an offset  $K$ .

20. The apparatus of claim 13, wherein said adding circuit includes an  $n$ -bit adder, where  $N = 2^n$  and  $n$  is a positive integer, and wherein said sampling circuit is adapted to sample  $(N - M)$  of said pixels for every  $N$  pixels of said sequence.

21. The apparatus of claim 12, wherein said adding circuit includes an  $n$ -bit adder, where  $N = 2^n$  and  $n$  is a positive integer, and wherein said sampling circuit is adapted to sample  $N - M$  of said pixels for every  $N$  pixels of said sequence.

22. The apparatus of claim 12, further comprising a graphics display device for displaying transmitting the sampled said image data.

23. The apparatus of claim 12, further comprising a graphics display device

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for storing the sampled said image data in a memory.

24. A medium readable by a machine embodying a program of instructions executable by the machine to perform a method for down-scaling digital image data, comprising the steps of:

providing a sequence of image data; and

sampling the image data so that  $(N - M) \pm 1$  pixels of the image data are sampled for every  $N$  pixels of said sequence, where  $M$  and  $N$  are integers and  $M < N$ .

25. The medium of claim 24, wherein the method further comprises displaying the sampled said image data on the display.

26. The medium of claim 25, wherein the method further comprises creating a count sequence corresponding to said sequence of image data, determining whether an instance of said count sequence is less than  $N$ , and if true, selecting a corresponding instance of image data.

27. The medium of claim 26, wherein  $N = 2^n$ , where  $n$  is a positive integer, and wherein said step of sampling samples  $N - M$  of said pixels for every  $N$  pixels of said sequence.

28. The medium of claim 24, creating a count sequence corresponding to said sequence of image data, determining whether an instance of said count sequence is less than  $N$ , and if true, selecting a corresponding instance of image data.

29. The medium of claim 28, wherein  $N = 2^n$ , where  $n$  is a positive integer, and wherein said step of sampling samples  $N - M$  of said pixels for every  $N$  pixels of said sequence.

30. The medium of claim 29, further comprising beginning said count sequence at an offset  $K$ .

31. The medium of claim 25, wherein  $N = 2^n$ , where  $n$  is a positive integer, and wherein said step of sampling samples  $N - M$  of said pixels for every  $N$  pixels of said sequence.

32. The medium of claim 24, wherein  $N = 2^n$ , where  $n$  is a positive integer, and wherein said step of sampling samples  $N - M$  of said pixels for every  $N$  pixels of said sequence.

33. The medium of claim 24, further comprising transmitting the sampled said image data.

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34. The medium of claim 24, further comprising storing the sampled said image data in a memory.

35. A system for displaying images, comprising a camera, a host, a graphics display device, and a graphics controller, wherein said graphics controller comprises an apparatus for downscaling digital image data, said apparatus comprising a sampling circuit, for sampling a sequence of image data so that  $(N - M) \pm 1$  pixels of the image data are sampled for every  $N$  pixels of said sequence; where  $M$  and  $N$  are integers and  $M < N$ .

36. The system of claim 35, wherein said graphics display device comprises an embedded memory for storing the sampled said image data.

37. The system of claim 36, wherein said apparatus for downscaling further comprises an adding circuit for creating a count sequence corresponding to said sequence of image data, wherein said sampling circuit is adapted for determining whether an instance of said count sequence is less than  $N$ , and if true, selecting a corresponding instance of image data.

38. The system of claim 37, wherein said adding circuit includes an  $n$ -bit adder, where  $N = 2^n$ ,  $n$  is a positive integer, and wherein said sampling circuit is adapted to sample  $(N - M)$  of said pixels for every  $N$  pixels of said sequence.

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39. The system of claim 38, wherein said graphics display device includes one or more LCD panels.

40. The system of claim 35, wherein said apparatus for downscaling further comprises an adding circuit for creating a count sequence corresponding to said sequence of image data, wherein said sampling circuit is adapted for determining whether an instance of said count sequence is less than  $N$ , and if true, selecting a corresponding instance of image data.

41. The system of claim 40, wherein said adding circuit includes an  $n$ -bit adder, where  $N = 2^n$  and  $n$  is a positive integer, and wherein said sampling circuit is adapted to sample  $(N - M)$  of said pixels for every  $N$  pixels of said sequence.

42. The system of claim 41, wherein said adding circuit is further adapted to begin said count sequence at an offset  $K$ .

43. The system of claim 36, wherein said adding circuit includes an  $n$ -bit adder, where  $N = 2^n$  and  $n$  is a positive integer, and wherein said sampling circuit is adapted to sample  $(N - M)$  of said pixels for every  $N$  pixels of said sequence.

44. The system of claim 35, wherein said apparatus for downscaling further comprises an adding circuit for creating a count sequence corresponding to said sequence of image data, and wherein said adding circuit includes an  $n$ -bit adder, where  $N = 2^n$  and



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n is a positive integer, and wherein said sampling circuit is adapted to sample  $(N - M)$  of said pixels for every N pixels of said sequence.

45. The system of claim 35, wherein said system is adapted for transmitting the sampled said image data.

46. The system of claim 35, wherein said system is adapted for storing the sampled said image data in a memory.

47. The system of claim 35, wherein said graphics display device is adapted for displaying the sampled said image data.